

APPARATUS FOR DECREASING SKIP COATING ON A PAPER WEB

Abstract of the Disclosure

An fountain applicator for applying coating liquid onto a web of paper carried past the applicator, has a coating liquid flow path that includes a curved surface along which a sheet of the coating liquid is flowed to subject the sheet to centrifugal force to cause air entrained in the coating liquid to move away from one side of the sheet that is toward the curved surface, so that the one side is relatively free of entrained air. After being flowed along the curved surface, the sheet of coating liquid is directed toward the web in a free standing jet curtain of coating liquid, to contact the web surface primarily with the one relatively air-free side of the coating liquid sheet to decrease the occurrence of skip coating on the web surface, especially when the web is traveling past the applicator at high speeds. The coating is applied in excess onto the web surface and is metered and leveled to a desired coat weight by a downstream doctor. The downstream doctor may comprise a single metering device, or it may comprise an intermediate metering device followed by a final metering and leveling device.